

# Report to the Iowa General Assembly

## Viral Hepatitis Study

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Viral hepatitis describes those infections that can cause inflammation of the liver, are infectious, and are caused by viruses. Some types of hepatitis are acute (e.g., hepatitis A) while others may become chronic and even fatal (e.g., hepatitis B and C). Common symptoms of viral hepatitis include jaundice, abdominal pain, fatigue, loss of appetite and nausea. All cases of viral hepatitis are potentially communicable, and can have devastating effects on the lives of those infected. Cases of viral hepatitis, most commonly hepatitis A, B, or C, are reported to the Iowa Department of Public Health (IDPH) as mandated by the Iowa Code section 139A.3 and the Iowa Administrative Code 641, Chapter 1.

The financial burden caused by viral hepatitis nationally is extensive, as estimates of present and future costs of hepatitis C range between \$600 million (CDC) to \$14.1 billion in direct costs, \$21.3 billion in disability, and \$54.2 billion due to premature mortality (Wong, 2004). These costs do not include loss in wages, leave from employment, medical costs, and overall health and quality of life deterioration suffered by persons infected with viral hepatitis.

## **Results of the Study**

No funds were received to perform a study to create an epidemiological profile of hepatitis C and assess its current and future impact on the state.

There were an estimated 4.1 million cases of hepatitis C in the United States, and up to 85 percent of these cases are chronic. According to the 2006 census population estimate for Iowa, there were 2,982,085 people residing in the state. The Centers for Disease Control and Prevention (CDC) estimate that 1.8 percent of the state's population, or 53,678 Iowans, have potentially been infected with the hepatitis C virus. To date, approximately 10,630 cases of hepatitis C have been identified by IDPH. See Attachment 1 on page 9.

## **Vaccination and Testing Program**

Before state funding was secured for hepatitis C virus (HCV) testing, counseling, and referral, funds from the HIV prevention cooperative agreement and from the Immunization Program's Section 317 Grant Program were used to establish integrated HIV and HCV counseling and testing with hepatitis A and B immunizations at eight test sites in the state.

With the state funding, this program was expanded. In the latter part of 2006, two Requests for Proposals (RFPs) were issued to expand the services. The purposes of the RFPs were:

- To increase the number of local health departments that provide integrated HIV and viral hepatitis services; and

- To provide HIV and viral hepatitis services to specific, hard-to-reach populations through outreach, social network recruiting strategies, and other innovative approaches that reach high-risk individuals where they gather.

As a result of the RFP, nine local public health departments have integrated hepatitis services into their HIV/STD counseling, testing, and referral (CTR) programs targeting high-risk individuals. In addition, five agencies, including three community-based organizations, are implementing strategies to provide hepatitis C testing and adult vaccinations to hard-to-reach populations.

In 2005 and 2006, hepatitis C testing and hepatitis A and B immunizations were restricted to injection drug users who presented at eight local health departments that were current HIV CTR contractors. The department's data reporting system was expanded in 2006 to allow for collection of hepatitis C risk information, testing data, referral information, and data on whether adult hepatitis immunizations were offered. The number of doses of adult hepatitis vaccine administered is collected in IRIS, the state's immunization registry. Both systems are Web-based.

In 2007, eligibility criteria for testing and immunization were expanded with the state appropriation. All HIV CTR contractors were required to include hepatitis education in HIV CTR visits and to offer HCV testing to the following at-risk groups:

- Persons who have ever injected drugs;
- Injection drug users who share needles or other equipment;
- Persons who received blood, blood products, or organ transplants prior to 1992; and
- Persons ever on long-term hemodialysis.

All contractors were also required to offer adult immunizations for hepatitis A and B to the following populations:

- Injection and non-injection drug users;
- Men who have sex with men;
- Persons with a current STD diagnosis (within the past 90 days);
- HIV and/or HCV-infected persons; and
- Sexual partners of persons infected with HIV, hepatitis A (HAV), and/or hepatitis B (HBV).

Outreach is conducted by contractors offering HCV testing and adult hepatitis immunizations to hard-to-reach populations through the following venues: 18 substance abuse centers, two methadone clinic, nine community-based correctional facilities, four county jails, eight medical clinics, 24 shelters (i.e., homeless shelters, transitional housing, abuse facilities), four STD clinics (non-county facilities), four minority-based service agencies, and 20 other venues (parks, churches, bars, and events).

In 2006, 1,657 persons were tested for hepatitis C infection (Table 1). In 2007, 1,345 persons were tested (Table 2). Contractors estimated that 1,200 persons would be tested in 2007. Although the number in 2007 is considerably lower than the number tested in 2006, preliminary data reveal that contractors are more strictly following screening criteria for the presence of risk factors, and thereby increasing positivity rates. Despite testing 503 fewer individuals for HCV in 2007 (through October), ten more HCV-positive persons have been diagnosed than were in 2006.

**Table 1: Hepatitis C Tests at State-funded Testing Sites  
2006**

<b>Counseling, Testing, and Referral Site</b>	<b>Number Tested</b>	<b>Number Positive</b>	<b>Percent Positive</b>
Black Hawk County Health Department	148	5	3%
Cerro Gordo County Health Department	248	9	4%
Council Bluffs City Health Department	12	2	17%
Johnson County Public Health	51	7	14%
Linn County Health Department	23	3	13%
Polk County Health Department	1,073	50	5%
Scott County Health Department	33	10	30%
Siouxland District Health Department	69	5	7%
<b>Grand Total</b>	<b>1,657</b>	<b>91</b>	<b>5%</b>

**Table 2: Hepatitis C Tests at State-funded Testing Sites  
January 1, 2007 Through December 31, 2007**

<b>Counseling, Testing, and Referral Site</b>	<b>Number Tested</b>	<b>Number Positive</b>	<b>Percent Positive</b>
AIDS Project Central Iowa – Des Moines	70	17	24%
Black Hawk County Health Department	174	8	5%
Cerro Gordo County Health Department	244	9	4%
Council Bluffs City Health Department	24	7	29%
Des Moines County Health Department	23	2	9%
ICARE/MECCA – Iowa City	16	4	25%
Johnson County Public Health	52	12	23%
Linn County Health Department	27	4	15%
Polk County Health Department	573	40	7%
Siouxland Community Health Center	90	13	14%
Siouxland District Health Department	52	5	10%
<b>Grand Total</b>	<b>1,345</b>	<b>121</b>	<b>9%</b>

In 2006, 1,653 doses of hepatitis A, B, or combination (A and B) vaccine were administered as follows: 1,346 doses of hepatitis A and B combination (Twinrix) vaccine, 152 doses of monovalent HAV vaccination, and 155 doses of monovalent hepatitis B vaccination. It is projected that approximately 1,800 doses of hepatitis A, B, or combination (A and B) vaccine will be administered in 2007.

**Table 3: Doses of Hepatitis Vaccine Administered  
2006**

<b>County Health Department</b>	<b>Total Number High-Risk Individuals Seen</b>	<b>Total Doses Hepatitis A Administered</b>	<b>Total Doses Hepatitis B Administered</b>	<b>Total Doses Combination A &amp; B Administered</b>
Black Hawk	23	2	3	101
Cerro Gordo	90	7	0	32
Linn	137	4	0	32
Polk	243	51	81	617
Scott	1,045	49	51	377
Siouxland District	961	39	20	187
<b>Total</b>	<b>2,499</b>	<b>152</b>	<b>155</b>	<b>1,346</b>

### **Development and Distribution of Viral Hepatitis Information**

Educational materials can be used in a variety of settings, serve a variety of purposes, and come in many different formats. The HIV/AIDS/Hepatitis Program uses two main types of printed materials to communicate hepatitis education messages. Fact sheets are usually used to deliver detailed or technical information in a simple and easy-to-read format. Fact sheets are located on the department's Web site. Pamphlets and brochures are used to disseminate health-related information to consumers. Brochures are commonly used to supplement presented material, are mailed to consumers, or act as reference materials at health fairs and in clinic waiting rooms.

Two state-specific hepatitis C brochures were created with funds provided by the Iowa General Assembly. These brochures outline common signs and symptoms of viral hepatitis, risk factors, modes of transmission, prevention strategies, where to find hepatitis vaccines, and potential treatments. Hepatitis brochures are made available to the public free of charge through the clearinghouse in Cedar Rapids. The

HIV/AIDS/Hepatitis Program's Web page also offers a variety of hepatitis information, including fact sheets, brochures, posters, videos, guidelines and recommendations for healthcare providers, and links to other beneficial hepatitis sites. In addition, the program uses statewide media advertising campaigns to promote hepatitis services and hepatitis prevention messages.

To determine the extent of the distribution of education materials by the HIV/AIDS/Hepatitis Program, the clearinghouse's database was examined. The program distributed 6,780 hepatitis brochures in FY 2006 and 10,835 brochures in FY 2007. Table 4 below provides a break down of all hepatitis materials sent to the citizens of Iowa in FY2006 and Table 5 summarizes distribution in FY2007.

**Table 4: Distribution of Hepatitis Information through the Clearinghouse  
FY 2006**

<b>Topic</b>	<b>Pieces Sent</b>
<b>Viral Hepatitis Brochures</b>	
• Hepatitis ABC (Harm Reduction Coalition)	51
• Viral Hepatitis Integration for HIV Prevention Community Planners (CDC)	60
• Viral Hepatitis (Iowa Department of Public Health)	5,642
<b>Hepatitis A Brochures</b>	
• Prevent Hepatitis A (CDC)	0
• Spanish - Prevent Hepatitis A (CDC)	11
<b>Hepatitis B Brochures</b>	
• Living with Chronic Hepatitis B (CDC)	15
• Spanish-Living with Chronic Hepatitis B (CDC)	11
• Prevent Hepatitis B-Get Vaccinated (CDC)	51
• Spanish-Prevent Hepatitis B (CDC)	10
• Hepatitis B and You (CDC)	13
• Spanish-Hepatitis B and You (CDC)	1
<b>Hepatitis C Brochures</b>	
• Hepatitis C - Prevention (CDC)	175
• Hepatitis C-You may be at Risk (CDC)	40
• Spanish-Hepatitis C - You may be at risk (CDC)	20
• Living with Chronic Hepatitis C (CDC)	55
• Spanish-Living with Chronic Hepatitis C (CDC)	8
• Hepatitis C - Remember to ask your Doctor (CDC)	42
<b>Miscellaneous</b>	
• Safer Works-If You Shoot Drugs (CDC)	575
<b>Total Brochures Distributed</b>	<b>6,780</b>

**Table 5: Distribution of Hepatitis Information through the Clearinghouse  
FY 2007**

<b>Topic</b>	<b>Pieces Sent</b>
<b>Viral Hepatitis Brochures</b>	
• Viral Hepatitis Integration for HIV Prevention Community Planners (CDC)	0
• Viral Hepatitis (Iowa Department of Public Health)	5,760
<b>Hepatitis A Brochures</b>	
• Prevent Hepatitis A (CDC)	227
• Spanish - Prevent Hepatitis A (CDC)	66
<b>Hepatitis B Brochures</b>	
• Living with Chronic Hepatitis B (CDC)	77
• Spanish-Living with Chronic Hepatitis B (CDC)	46
• Prevent Hepatitis B-Get Vaccinated (CDC)	174
• Spanish-Prevent Hepatitis B (CDC)	60
• Hepatitis B and You (CDC)	0
• Spanish-Hepatitis B and You (CDC)	0
<b>Hepatitis C Brochures</b>	
• Hepatitis C Prevention (CDC)	496
• Spanish - Hepatitis C Prevention (CDC)	9
• Hepatitis C-You may be at Risk (CDC)	127
• Spanish-Hepatitis C - You may be at risk (CDC)	78
• Living with Chronic Hepatitis C (CDC)	70
• Spanish-Living with Chronic Hepatitis C (CDC)	44
• Hepatitis C - Remember to ask your Doctor (CDC)	1
• Knowledge is Freedom – What Veterans Need to Know About Hepatitis C (Iowa Department of Public Health)	3,600
<b>Total Brochures Distributed</b>	<b>10,835</b>

### **Summary and Future Programmatic Plans**

The HIV/AIDS/Hepatitis Program has been successful in integrating viral hepatitis into HIV and sexually transmitted disease services throughout the state and in expanding the reach of these services to marginalized populations. This successful initiative has provided additional resources to allow the hepatitis C program to find HCV-positive individuals who did not know that they were infected and to protect many high-risk people from hepatitis A and B through immunizations.

The HIV/AIDS/Hepatitis Program has been working with the bureau's quality assurance program to evaluate the services provided. EvaluationWeb, the state's Web-based reporting system, was upgraded in 2006 to allow for collection of risk information, test results, referral information, and data on whether immunizations were offered. Site visits will be conducted in 2008 and technical assistance will be offered to improve delivery of services, when needed.

Other integration projects have begun. The hepatitis C coordinator is collaborating with the American Red Cross in Des Moines to integrate viral hepatitis education into their HIV/STD educational programs. In 2008, the program will work to integrate hepatitis education into education occurring at substance abuse facilities across the state.

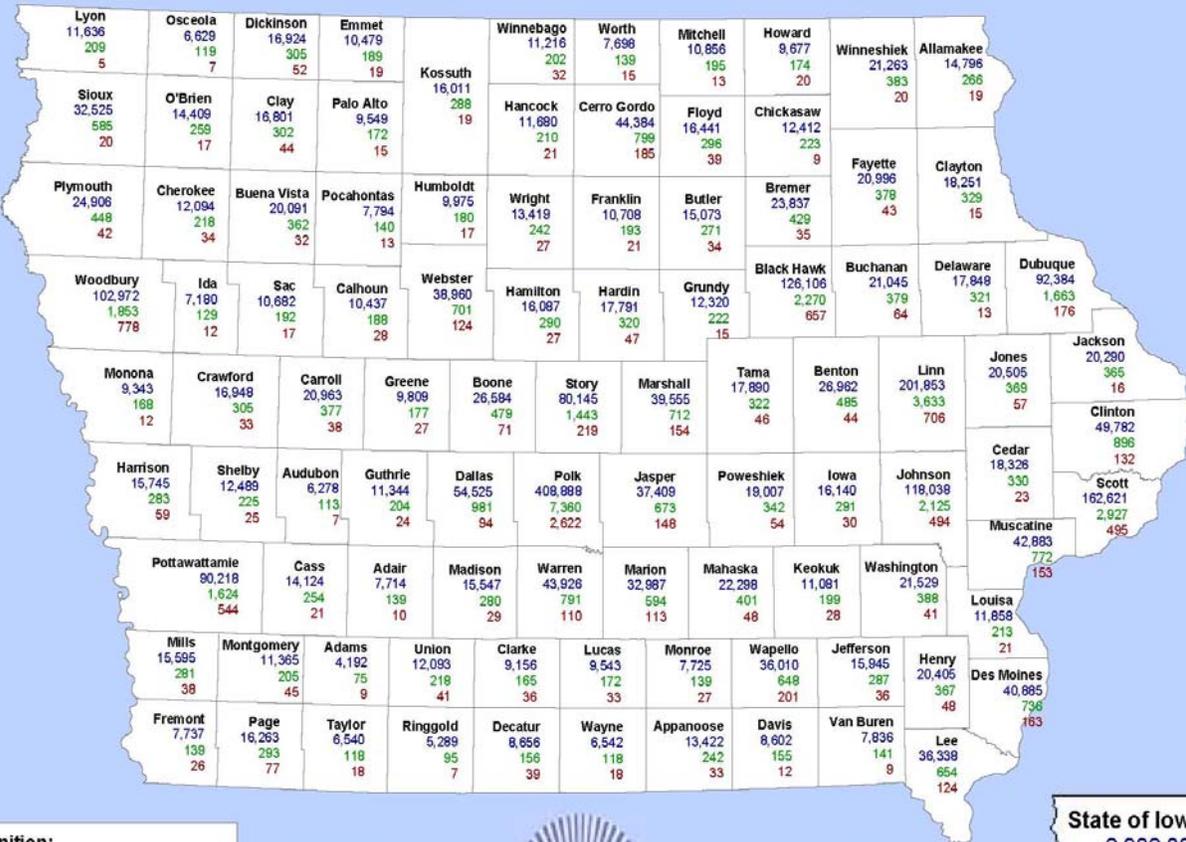
To allow for expansion of hepatitis C testing services to hard-to-reach populations, the department is exploring the use of Home Access®, a blood collection kit. Contractors could collect samples in remote locations without having a phlebotomist present. This may be piloted in 2008.

The department is in the final stages of developing a hepatitis resource guide to assist service providers and people living with hepatitis C to help them gain a better understanding about the virus and the various resources available within their communities. This guide provides basic information about the virus, testing, treatment, liver health, and HCV Web resources. It also includes a list of physicians who provide hepatitis treatment services.

Advertising will continue to be a focus for the hepatitis program. In the upcoming years the program will continue to develop public service announcements to help inform citizens about the risk of contracting hepatitis C, the importance of getting testing for hepatitis C, and of getting vaccinated against hepatitis A and B.

**Attachment 1: Reported Cases of Hepatitis C through September 2007**  
**Iowa Dept. of Public Health**

# Cumulative Reported Cases of Hepatitis C in Iowa January 1999 - September 2007



**Label definition:**  
 County name  
 Population (2006 Estimated Census)  
 HCV estimates (1.8%)  
 Cumulative Reported Cases

Source: Iowa Department of Public Health, Viral Hepatitis Program  
 Prepared by: IDPH Bureau of Information Management, GIS Service



**State of Iowa**  
 2,982,085  
 53,678  
 10,630

9/26/2007